

ABSTRACT

Nanoparticulate titanium dioxide coating produced by educing  
flocclulates of titanium dioxide nanoparticles from a titanyl  
5 sulfate solution and dispersing the nanoparticles in a polar sol-  
forming medium to make a sol suitable as a coating usable to  
impart photocatalytic activity, U.V. screening properties, and  
fire retardency to particles and to surfaces. The photocatalytic  
material and activity is preferably localized in dispersed  
10 concentrated nanoparticles, spots or islands both to save costs  
and leverage anti-microbial effects.